

**THE**

*Feb 21*

~~a plurality of tubes having interior and exterior surfaces and having closed and open ends:~~

a tube support member having first and second surfaces through which extend openings for receiving said open ends of said plurality of tubes, said open ends of said tubes appearing at said second surface;

f gasse

4.

A ceramic oxygen generator comprising:

an ionically conductive ceramic electrolyte including:

a tube support member having first and second surfaces through which extend openings for receiving said open ends of said plurality of tubes, said open ends of said tubes appearing at said second surface;

a second electrically conductive coating covering said interior surfaces of said plurality of tubes and said second surface of said tube support member forming a second electrode connectable to a source of electric potential of a second polarity, and

5. The ceramic oxygen generator described in claim 4 wherein said plurality of tubes are formed into rows and columns on said tube support member with portions of said first and second surfaces interposed between the rows and columns and further comprising:

6. The ceramic oxygen generator described in claim 5 wherein said means forming an electrical circuit comprises:

cuts formed in said first and second electrodes between said columns of tubes, said cuts extending longitudinally of and between the columns of tubes so that the portions of said first and second electrodes on opposite sides of each said cut are electrically separated, vias extended through said first and second surfaces adjacent each of said tubes and electrical connections extending through said vias connecting a first electrode portion of each

said tube in a row to a second electrode portion of a tube in an adjacent column in the same row to form a series connection across each row of tubes.

4  
7  
The ceramic ~~oxygen generator~~<sup>element</sup> described in claim ~~6~~<sup>3</sup> wherein said electrical connections are constituted by the material forming said first and second electrodes coating the surfaces of said ceramic electrolyte extending through said vias.

32

0902001-02060

11